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**STORAGE CAGE FOR GARBAGE****Publication number:** JP10109703**Publication date:** 1998-04-28**Inventor:** AKABOSHI TOSHIO**Applicant:** TECHNO STAR KK**Classification:****- International:** B65F1/14; B65D6/16; B65D88/10; B65D90/08;  
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7): B65F1/14; B65D6/16; B65D88/10; B65D90/08**- european:****Application number:** JP19960283078 19961005**Priority number(s):** JP19960283078 19961005**Report a data error here****Abstract of JP10109703**

**PROBLEM TO BE SOLVED:** To facilitate replacement of a core rib by forming a core rib bag body to/from which the core frame can be inserted/removed. **SOLUTION:** A core rib 2 is made of a PRP pole and the like provided with high flexibility and highly deformability. A cage is formed by binding the end parts of a core rib bag body 3 together by machine sewing. As the connecting parts in the cage need flexibility for providing the foldable cage, the length of the core rib 2 is shortened as against that of the core rib bag body 3. The cage is formed by arranging the core rib bag body 3 without inserting any core rib 2 into any side face ridge part 12 and sewing and fixing a mesh body 1 to the core rib bag body 3. When the core ribs 2 are inserted into upper face opening ridge parts 11 and into the side face ridge parts 12, the respective ridge parts are stretched and stand by themselves so as to form a box shape. On the other hand, in this cage, respective corner parts 8 are flexibly connected to each other, so that the cage can be flattened when the respective ridge parts are folded up even if the core ribs 2 are inserted, so that it is convenient for storage.

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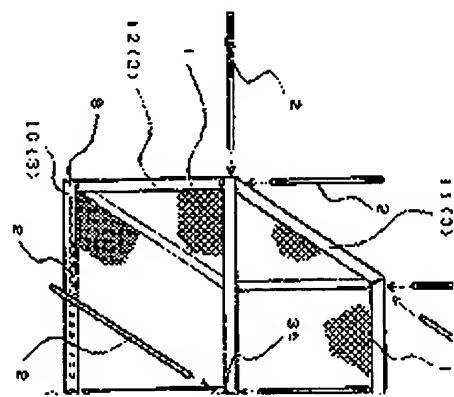
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## (54) 【発明の名称】 塗装等の収納ケージ

## (57) 【要約】

【課題】 本発明は、塗装類等を収納する収納ケージであって、使用しないときには折りたみ可能とするものである。

【解決手段】 本発明のケージは、側面と底面を綱体1等で形成すると共に上開口を有し、上開口稜部11と側面後部12を芯骨2を挿入の芯骨袋体3で形成し、芯骨袋体3を芯骨2の挿入と抜き出しを可能に形成するものであり、ケージは芯骨2を装着しない状態で形成できる。



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## 【特許請求の範囲】

【請求項1】 側面と底面を網体等で形成すると共に上開口を有し、上開口稜部と側面稜部を芯骨を挿入の芯骨袋体で形成のケージであって、芯骨の挿入と抜き出しを可能に前記芯骨袋体を形成してなることを特徴とする座芥等の収納ケージ。

【請求項2】 側面と底面を網体等で形成すると共に上開口を有し、上開口稜部を芯骨を挿入の芯骨袋体で形成すると共に、上開口稜部と下閉鎖稜部に弾性体を取り付けることを特徴とする座芥等の収納ケージ。

【請求項3】 上開口稜部と下閉鎖稜部にわたって弾性袋体を取付け、その弾性体の挿入と抜き出しが可能に前記弾性袋体を形成することを特徴とする請求項2の座芥等の収納ケージ。

【請求項4】 弹性体をS字平坦型とすることを特徴とする請求項2又は請求項3の座芥等の収納ケージ。

## 【発明の詳細な説明】

## 【0001】

【発明の属する技術分野】 本発明は、座芥類等を収納する折りたみ可能な収納ケージに関する。

## 【0002】

【従来の技術】 従来、除草作業や清掃作業に使用される収納器材として、特開平05-42202号公報等の網目状ケージがある。この網目状ケージは、特に可撓性を有する厚肉のメッシュ状成形体で形成した底面と、ネットまたはメッシュ状不織布等からなるネット状成形体で形成した側面とを組合せたものであり、使用時には上開口が自立開口でき、使用しない時は簡単に折りたたむことができるようにしてある。

## 【0003】

【発明が解決しようとする課題】 従来の網目状ケージに座芥等を満杯でない状態で積み重ねると、下に位置する網目状ケージの側面稜部に取り付けの芯骨袋体の芯骨が曲がり、時には芯骨袋体から突出したり、折損したりする。即ち、網目状ケージが満杯でないため、上側の網目状ケージの重さによって、側面稜部の芯骨が折れ曲がって折れたり、芯骨袋体を突き破ることとなる。又、従来のケージは、芯骨を芯骨袋体に順次挿入しながら、順次、ネットまたはメッシュ状不織布等を側面に縫いつけて組み立てている。従って、組み立てたケージは、側面

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骨の挿入と抜き出しを可能に芯骨袋体がある。ケージは芯骨を装着しない状態で、後から装着することによって箱状のケージができる。従って、芯骨を抜いたケージり、ケージの側面に名称等の布を容易にことができる。請求項2のケージは、側面等で形成すると共に上開口を有し、上開口挿入の芯骨袋体で形成すると共に、上開口稜部に弾性体を取り付けるものである。

10 って、ケージは箱状にできることができる。又、座芥が満杯状態でないケージを載せても、この弾性体の高い韌性体の折損防止となって、ケージの破壊を防ぐ。請求項3のケージは、上開口稜部と下閉鎖部に弾性袋体を取付け、その弾性体の挿入と抜き出しで芯骨袋体を形成するものであり、弾性によって、側面は柔軟状態となって、側面することが容易にできて、名称等の布をつけることができる。請求項4のケージは、平坦型とすることによって、より円滑に組み立てができるし、弾性体の高い韌性によって、重ねが可能である。

## 【0005】

## 【発明の実施の形態】

（第1の実施の形態） 図1（A）は自立りたたみ自在な籠状容器の斜視図、図1（B）は側面断面図である。ケージは、芯骨袋体1を縫合固定して上開口1を有するものであって、底面は強固にするため要でないが、各底面稜部10には芯骨2・3を介して柔軟な網体1を縫合固定し、芯骨2は芯骨袋体3に内挿状態で側面開口稜部11（4ヶ所）には、芯骨2・3で芯骨袋体3を配設して、より円滑に開口1を有するケージを形成する。尚、1には芯骨2を挿入、抜き出しが可能になら（B）に示すように、芯骨袋体3はボリ成型樹脂シートで袋状に製作し、端部をミルク部3aを形成し、他端部を開放口3b

【0006】 又、前記芯骨2は、FRP

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口縫部11と側面縫部12は芯骨2を挿入しない状態で製作する。そして、前記工程の後のケージは、上面開口縫部11と側面縫部12に芯骨2を挿入すると、各縫部は張設状態となって自立して箱状になる。一方、このケージは、前記芯骨2を挿入した状態であっても、各隅部8が柔軟に結合してあるため、各縫部を折り曲げることによって平坦状になって保管が便利である。又、このケージは、芯骨2を抜くことによっても平坦状にすることができる。

【0008】以上のように、各縫部に取付けの芯骨袋体3は、芯骨2の挿入と抜き出しを可能に形成してあるため、芯骨2を挿入しない柔軟な状態でケージを作成することができるため、ミシン縫いが容易である。又、ケージとして使用しているときに、芯骨2を折損した時であっても、新たな芯骨2に取り替えが容易である。

【0009】(第2の実施の形態)本実施の形態のケージを図2に示し、第1の実施の形態とは、側面縫部12に弹性袋体20を介して製作する点を異にする。即ち、ケージは、上開口縫部11と底面縫部10との間に、側面縫部12の際に弹性袋体20を取付けて、側面を網体1で縫合固定する。この弹性袋体20は、ポリエチレン等の合成樹脂シートで製作し、端部をミシン縫いで閉鎖部20aを形成し、他端部を開口部20bを形成し、鉤21aとその鉤止21bを介して固定可能なファスナで開閉可能として、弹性袋体25の取り替えを可能とする。又、前記弹性袋体20に挿入、抜き出しそる弹性袋体25は、コイルスプリング等、種々の形状のものを使用できるが、S字平面型を用いる方が、側面を平坦に立設できて望ましい。

【0010】この弹性袋体20は、上面開口縫部11の相対する側面で最も離反位置に取り付けることによって、上面開口縫部11と底面縫部10は反力を得て側面が立設可能となる。従って、この弹性袋体20は、弹性袋体25の強度を考慮して、2箇所でなく、各側面にも取り付けることであってもよい。尚、この弹性袋体25は弹性袋体20を介さず、直接、上面開口縫部11と底面縫部10に装着可能に取り付けてもよいが、見た目の美観を発するためには弹性袋体20に挿入する方式が望ましい。

【0011】前記ケージは、上面開口縫部11に芯骨袋

10 付けることなく、ケージを作成しておき、称等の布を側面に縫いつけて出荷すること【0012】又、芯骨2と弹性袋体25を弹性袋体25によって側面が立設の箱状となる柔軟に結合してあるために、折り畳むこと状にすることができる。即ち、芯骨2と挿入した状態のケージであっても、使用時の弾发力を介して側面が立設して箱状といふ場合には、前記芯骨2と弹性袋体25をく、そのまま折り畳んで平面状にすること【0013】又、このケージは、塵芥等積み重ねてトラック等で搬送する。このケージが満杯であるときには、その塵芥で上を支持するので問題がないが、少ないときにその重畠がかかる。しかし、この弾が高いためよく歯がって、弹性袋体3を弹性袋体25が折損したりすることができる。即ち、従来のケージは、芯骨2で側成しているので、その芯骨2の剛性が少2の歯折が少なくて折損するか、芯骨袋ことが生ずるが、弹性袋体25、特に、S字袋体を使用することによってかかる不都合【0014】尚、弹性袋体のファスナ2側10に取り付けてあるため、ケージをき、弹性袋体25は下方向に荷重がかかるとなく維持でき、弹性袋体25が弹性袋体すことがない利点があるが、上面開口縫てもよい。又、底面及び側面には、編み張設してあるが、塵芥の種類に応じて柔構成して、細かい塵に対処可能としても、上開口縫部11と底面縫部10には、413を介して形成してあるが、重畠物を入々の使用目的に合わせて強度を考慮していく。芯骨袋体3の設置位置は実施の形態時には結構のために側面や底面の中央部構成してもよい。

【0015】

【発明の効果】本発明の請求項1のケージ入と取出しを可能に芯骨袋体を形成して、の取り替え容易にする。又、請求項2の

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## 【図面の簡単な説明】

【図1】第1の実施の形態のケージを示す斜視図である。

【図2】第2の実施の形態のケージの斜視図である。

## 【符号の説明】

1 細体

2 芯骨

3 芯骨袋体

3a 閉鎖部

\* 3b 開放口

8 隅部

10 底面稜部

11 上面閉口稜部

12 側面稜部

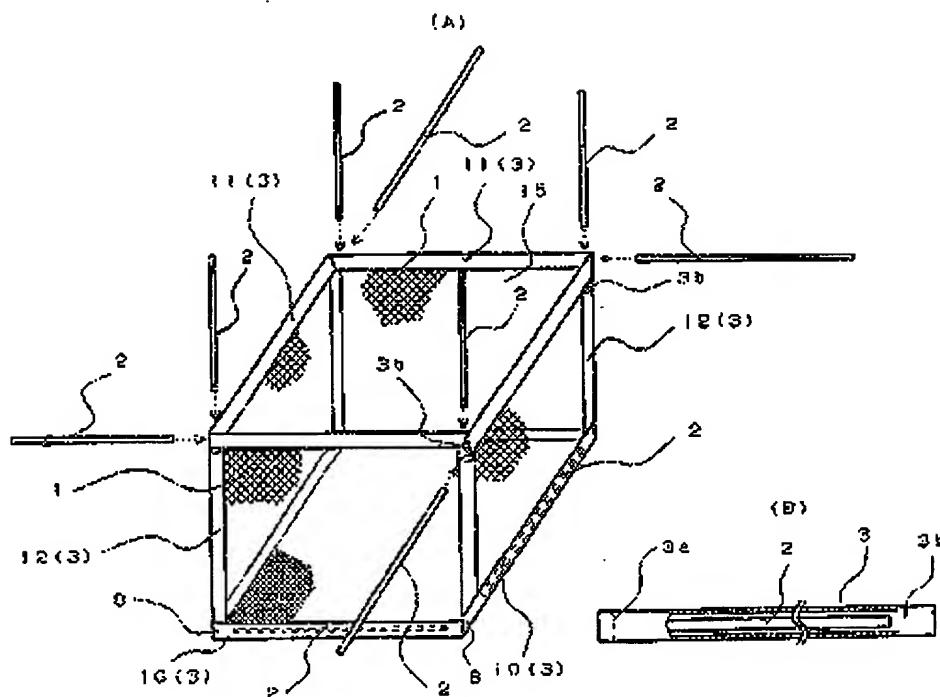
20 弾性袋体

20b 閉口部

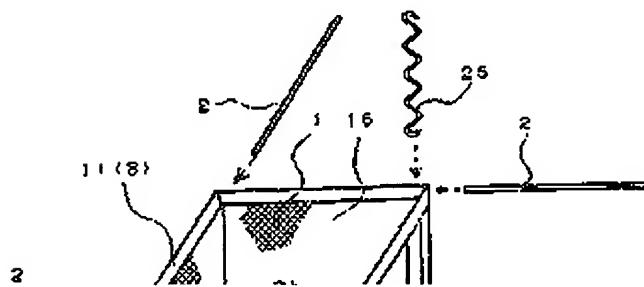
25 弹性体

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【図1】



【図2】



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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]****[0001]**

[Field of the Invention] This invention relates to the receipt cage which contains dust and in which chip box \*\*\*\* is possible.

**[0002]**

[Description of the Prior Art] Conventionally, there are mesh-like cages, such as JP,05-42202,U, as a receipt equipment used for a weeding-out activity or cleaning. It can carry out independence opening of the upper opening at the time of use, and when not using it, it enables it for especially this mesh-like cage to combine the base formed with the heavy-gage mesh-like Plastic solid which has flexibility, and the side face formed by the network-like organizer which consists of a network or a mesh-like nonwoven fabric, and to have folded it up simply.

**[0003]**

[Problem(s) to be Solved by the Invention] If dust etc. is accumulated on the conventional mesh-like cage in the condition which is not full, the central frame of the central frame bag body of installation will bend to the side-face arris part of the mesh-like cage located downward, and, occasionally it will project or break from a central frame bag body in it. That is, since the mesh-like cage is not full, the central frame of a side-face arris part will bend and break with the weight of an upper mesh-like cage, or a central frame bag body will be broken through. Moreover, to the central frame bag body, carrying out sequential insertion, one by one, the network or the mesh-like nonwoven fabric was sewn on the side face, and the conventional cage is assembling the central frame. Therefore, the assembled cage can be folded up through a side-face arris part, and serves as box-like at the time of use. However, since a central frame becomes obstructive and sewing-machine sewing cannot perform sewing a name cloth etc. by the sewing machine on the side face of a cage, a cage made possible is desired. Then, this invention offers the cage which cancels this un-arranging.

**[0004]**

[Means for Solving the Problem] The cage of claim 1 has upper opening while forming a side face and a base with gauze etc., it forms an upper opening arris part and a side-face arris part with the central frame bag body of insertion of a central frame, and forms a central frame bag body for insertion and the draw of a central frame possible. A cage can be formed in the condition of not equipping with a central frame, and can be used as a box-like cage by equipping with a central frame later. Therefore, the cage which extracted the central frame is flexible and can carry out sewing-machine sewing of the cloth, such as a name, easily on the side face of a cage. The cage of claim 2 has upper opening while forming a side face and a base with gauze etc., and it attaches an elastic body in an upper opening arris part and the bottom obturator-crest section while it forms an upper opening arris part with the central frame bag body of insertion of a central frame. With this elastic body, a cage can be made box-like and can be folded up. Moreover, even if dust carries a cageful of a cage which is not in a full condition, by the high toughness of this elastic body, it becomes breakage prevention of an elastic body and destruction of a cage can be prevented. When the cage of claim 3 attaches an elastic bag body over an upper opening arris part and

the bottom obturator-crest section, and insertion of the elastic body and a draw form an elastic bag body possible and extract an elastic body, it makes it possible for a side face to be flexible, and for being located in a sewing machine to be able to make a side face easy, and to carry out sewing-machine sewing of the cloth, such as a name. By using an elastic body as a S character flat pattern, the cage of claim 4 can be more smoothly made box-like, and the pile of a cage is possible for it by the high toughness of an elastic body.

[0005]

[Embodiment of the Invention]

(Gestalt of the 1st operation) the perspective view of the basket-like container which can be folded to which drawing 1 (A) is made as for independence opening, and drawing 1 (B) -- some central frame bag bodys -- it is a sectional view. Although a cage is not necessarily required since it forms in the configuration which carries out suture immobilization of the central frame bag body 3 and the flexible gauze 1, and has the upper opening 15 and a base strengthens, through the central frame bag body 3 of insertion of a central frame 2, it carries out suture immobilization and forms flexible gauze 1 in each base arris part 10. That is, a central frame 2 is formed in the central frame bag body 3 in the state of interpolation. Moreover, the central frame bag body 3 is arranged in the top-face opening arris part 11 (four places) in the condition of not inserting a central frame 2, and the cage which has the upper opening 15 in which opening is more smoothly possible is formed in it. In addition, as insertion and a draw are possible about the central frame 2 at said central frame bag body 3 and it is shown in drawing 1 (B), the central frame bag body 3 is manufactured to saccate with synthetic-resin sheets, such as polyethylene, sews an edge by the sewing machine, forms closing section 3a, and sets the other end to clear aperture 3b.

[0006] Moreover, said central frame 2 is the pole made from FRP etc., and the high thing of high deformans of toughness is used for it, and it makes it shorter than said central frame bag body 3. That is, since the bond part (corner) takes making ups and downs possible to a cage in order to combine and form the edge of the central frame bag body 3 by sewing-machine sewing and to make the cage foldable, it makes a central frame 2 shorter than the central frame bag body 3. Moreover, a cage arranges the central frame bag body 3 in the condition of not inserting a central frame 2 in the side-face arris part 12, carries out suture immobilization and forms gauze 1.

[0007] As mentioned above, a cage has the upper opening 15, and the base arris part 10 forms a central frame 2 in the state of insertion, and manufactures the top-face opening arris part 11 and the side-face arris part 12 in the condition of not inserting a central frame 2. And if a central frame 2 is inserted in the top-face opening arris part 11 and the side-face arris part 12, each arris part will be in a set-up condition, and the cage after said process will become independent, and will become box-like. On the other hand, since each corner 8 is flexibly combined even if it is in the condition which inserted said central frame 2, by bending each arris part, this cage becomes flatness-like and its storage is convenient. Moreover, this cage can be made into the shape of flatness also by extracting a central frame 2.

[0008] As mentioned above, since the central frame bag body 3 of anchoring to each arris part can create a cage in the flexible condition of not inserting a central frame 2 since insertion and the draw of a central frame 2 are formed possible, sewing-machine sewing is easy for it. Moreover, while using it as a cage, even if it is a time of breaking a central frame 2, exchange is easy for the new central frame 2.

[0009] (Gestalt of the 2nd operation) The cage of the gestalt of this operation is shown in drawing 2, and it differs in the point manufactured through the elastic bag body 20 to the side-face arris part 12 with the gestalt of the 1st operation. That is, a cage attaches the elastic bag body 20 between the upper opening arris part 11 and the base arris part 10 in the case of the side-face arris part 12, and carries out suture immobilization of the side face with gauze 1. This elastic bag body 20 is manufactured with synthetic-resin sheets, such as polyethylene, forms closing section 20a for an edge by sewing-machine sewing, forms opening 20b for the other end, and enables exchange of an elastic body 25 as closing motion being possible with a fixable fastener through \*\* 21a and its \*\*\*\* 21b. Moreover, although the thing of various configurations, such as a coil spring, can be used for the elastic body 25 which inserts in said elastic bag body 20, and is extracted and used as it, the direction which uses a S character flat

pattern can set up a side face evenly, and is desirable.

[0010] By attaching in an estrangement location most on the side face in which the top-face opening arris part 11 faces, the top-face opening arris part 11 and the base arris part 10 acquire reaction force, and the set-up of a side face of this elastic bag body 20 is attained. Therefore, this elastic bag body 20 may be not being two places and attaching also in each side face in consideration of the reinforcement of an elastic body 25. In addition, although this elastic body 25 may be directly attached in the top-face opening arris part 11 and the base arris part 10 mountable/unmountable without the elastic bag body 20, in order to do the fine sight of appearance so, the method inserted in the elastic bag body 20 is desirable.

[0011] said cage -- in the central frame bag body 3, gauze 1 is sutured by the base arris part 10 through the central frame bag body 3 in the state of insertion in a central frame 2, and a side face is sutured and manufactured by the top-face opening arris part 11 with gauze 1 through the elastic bag body 20. Therefore, in this manufacture process, although a cage is not box-like, it becomes box-like [ of independence opening ] by inserting a central frame 2 in the central frame bag body 3, and inserting an elastic body 25 in the elastic bag body 20. Since this cage is not a cage with which the central frame 2 was incorporated unlike the former, if a central frame 2 and an elastic body 25 are taken out, it is [ that it is not box-like ] flexible, and can newly carry out sewing-machine sewing of the cloth of a publication of a name etc. easily on a side face. Therefore, without sewing cloth, such as a name, on a side face beforehand, the cage is created, and when required, cloth, such as a name, is sewn on a side face and can be shipped to it.

[0012] Moreover, if a central frame 2 and an elastic body 25 are inserted, a side face will serve as box-like [ of a set-up ] with an elastic body 25, but since the corner 8 is combined flexibly, it can fold up and can be made a plane. That is, even if it is a cage in the condition of having inserted the central frame 2 and the elastic body 25, at the time of use, a side face sets up through the resiliency of an elastic body 25, and it becomes box-like, and without taking out said central frame 2 and elastic body 25, when not using it, it can fold up as it is and can be made a plane.

[0013] Moreover, this cage is accumulated where dust etc. is put in, and it is conveyed by truck etc. At this time, when a lower cage is full, since the weight of the upper cage is supported in that dust, it is satisfactory, but when few, that weight is applied to an elastic body 25. However, since this elastic body 25 has high toughness, it has bent well, and it differs from the former in that do not break through the elastic bag body 3 or an elastic body 25 does not break. That is, the conventional cage can cancel this un-arranging an elastic body 25 and by using the elastic body of a S character flat pattern especially, although there being little ups and downs of a central frame 2, and they breaking, or breaking through the central frame bag body 3 arises since the side-face arris part 12 is formed by the central frame 2, and there is little toughness of the central frame 2.

[0014] In addition, although the fastener 21 of an elastic bag body has the advantage to which an elastic body 25 can be maintained without carrying out opening since a load is applied downward, and an elastic body 25 does not jump out of the elastic bag body 20 when a cage is accumulated since it is attached in base arris part side 10, it may be formed in the top-face opening arris part 11 side. Moreover, although the stitch-like network 1 is stretched in the base and the side face, according to the class of dust, it constitutes from a flexible sheet etc., and is good for fine dust also as management being possible. Moreover, although formed in said upper opening arris part 11 and base arris part 10 through the central frame bag body 3 at four places, when putting in a heavy lift, that what is necessary is just to constitute in consideration of reinforcement according to the various purposes of use, the installation location of the central frame bag body 3 is not limited to the gestalt of operation, but for reinforcement, may be attached in the center section of a side face or the base etc., and, occasionally may be constituted.

[0015]

[Effect of the Invention] Since the cage of claim 1 of this invention has formed the central frame bag body possible, a central frame exchanges insertion and drawing of a central frame, and it makes them easy. Moreover, even if the cage of claim 2 accumulates a cage for dust in the state of receipt by

attaching an elastic body in an upper opening arris part and the bottom obturator-crest section, it is lost that a central frame breaks off it like before. The cage of claim 3 can change a cage into a flexible condition by extracting insertion of an elastic body and drawing, while exchange of an elastic body is possible, since it is what forms an elastic bag body possible. By using an elastic body as a S character flat pattern, the cage of claim 4 can be more smoothly made box-like, and the pile of a cage is possible for it by the high toughness of an elastic body.

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[Translation done.]

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**CLAIMS**

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**[Claim(s)]**

[Claim 1] Receipt cages, such as dust characterized by having upper opening while forming a side face and a base with gauze etc., being the cage of formation with the central frame bag body of insertion [ an upper opening arris part and a side-face arris part ] of a central frame, and coming to form insertion and the draw of a central frame said central frame bag body possible.

[Claim 2] Receipt cages, such as dust characterized by attaching an elastic body in an upper opening arris part and the bottom obturator-crest section while it has upper opening while forming a side face and a base with gauze etc., and forming an upper opening arris part with the central frame bag body of insertion of a central frame.

[Claim 3] Receipt cages, such as dust of claim 2 characterized by attaching an elastic bag body over an upper opening arris part and the bottom obturator-crest section, and insertion of the elastic body and a draw forming said elastic bag body possible.

[Claim 4] Receipt cages, such as dust of claim 2 characterized by using an elastic body as a S character flat pattern, or claim 3.

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